

polishing a surface of a SiC wafer by mechanochemical polishing using the chemical solution and a polishing cloth with a processing pressure having a range of approximately 0.1 –

C1  
Amended  
3.0 kgf/cm<sup>2</sup>; and

increasing oxygen concentration on the surface of the SiC wafer to promote the formation of an oxide of the SiC wafer by performing the polishing in the presence of the hydrogen peroxide water.

C2  
48. (Twice Amended) The method according to claim 44, wherein the method includes dropping the chemical solution onto the polishing cloth on the surface of the SiC wafer.

C3  
52. (Twice Amended) The method according to claim 49, wherein the method includes dropping the chemical solution, in which the solid powder is dispersed, onto the surface of the SiC wafer.

C4  
55. (Twice Amended) The method according to claim 53, wherein the method includes placing the solid powder on a member that is moved relatively to and contacts the surface of the SiC wafer when the surface is polished.

C5  
61. (Twice Amended) A mechanochemical polishing apparatus, comprising:  
a table on which an SiC wafer is held;  
a polishing cloth facing the holding table and movable relatively with respect to the SiC wafer to polish a surface of the SiC wafer using abrasive grains made of chromium (III) oxide in a pressure range of approximately 0.1 – 3.0 kgf/cm<sup>2</sup>; and

C5  
cmt4  
supply means for supplying a chemical solution including the abrasive grains and hydrogen peroxide water to the surface of the SiC wafer, so that an amount of oxygen reacting with the SiC wafer in the polishing cloth is increased.

C6  
69. (Twice Amended) The apparatus according to claim 61, wherein the polishing cloth is comprised of suede.

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Please add the following new claims:

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C7  
74. (New) The method according to claim 44, wherein the polishing cloth is comprised of suede.

75. (New) The method according to claim 44, further comprising increasing the oxygen concentration reacting with the SiC wafer during the increasing of the oxygen concentration on the surface of the SiC wafer.

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